

## General

#### Title

Medical home: percentage of children and adolescents who meet the threshold for having a medical home according to a subset of questions from the 2011-12 National Survey of Children's Health.

## Source(s)

2011/12 National Survey of Children's Health. CATI instrument (full-length survey). Rockville (MD): Health Resources and Service Administration, Maternal and Child Health Bureau, and Centers for Disease Control and Prevention, National Center for Health Statistics; 2012. 126 p.

#### Measure Domain

#### Primary Measure Domain

Clinical Quality Measures: Access

# Secondary Measure Domain

Clinical Quality Measure: Patient Experience

# **Brief Abstract**

# Description

This composite measure is used to assess the percentage of children and adolescents who meet the threshold for having a medical home according to a subset of questions from the 2011-12 National Survey of Children's Health. The medical home composite measure includes items related to six of the seven components of care first proposed by the American Academy of Pediatrics (AAP) — health care that is accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective. In the development of the measure, 31 of the 36 concepts in the AAP definition of medical home were assessed to be appropriate for patient report. The measure was designed through a national technical measurement specification panel facilitated by the CAHMI (2001-2003) and has been iteratively reviewed and approved by a national Technical Expert Panel to the federal Maternal and Child Health Bureau (MCHB). The measure builds upon work funded by the David and Lucile Packard Foundation and the Agency for Healthcare Research and Quality.

#### Rationale

National initiatives such as the U.S. Department of Health and Human Services' Healthy People 2010 have recently begun prioritizing the need to increase children's access to health care delivered under the medical home model, especially among children with special health care needs (Measuring Medical Home for Children and Youth).

Since the American Academy of Pediatrics (AAP) first came out with the definition of a medical home in 1992, many divergent interpretations of the concept have emerged. Many physicians have encountered difficulties with inadequate reimbursement for the care they provide to children within a medical home, even though care provided within a medical home is found to be less costly and more effective than care provided in emergency departments, and other urgent-care facilities (AAP). The medical home model helps physicians improve the effectiveness and efficiency of health care for all children.

The composite measure offered here creates a standardized assessment of whether children have access to an ongoing source of health care within a medical home and are receiving the high-quality care and services they need by using the AAP's multi-dimensional definition of medical home (Measuring Medical Home for Children and Youth). Due to feasibility and methodological constraints, the AAP's entire list of 37 desirable characteristics of a medical home is not included in this composite measure. The "Numerator Inclusions/Exclusions" field below describes how these questions map onto the components of AAP's larger definition of medical home.

#### Evidence for Rationale

Child and Adolescent Health Measurement Initiative (CAHMI). National Quality Measures Clearinghouse (NQMC) measure submission form: medical home: percentage of children and adolescents who meet the threshold for having a medical home according to a subset of questions from the 2011-12 National Survey of Children's Health. 2013 Apr. 16 p.

# Primary Health Components

Medical home; clinical experience; children

# **Denominator Description**

All children age 0 to 17 years in the United States for whom a 2011-2012 National Survey for Children's Health was completed (see the related "Denominator Inclusions/Exclusions" field)

# Numerator Description

Children who meet the following criteria for having a medical home:

Child has at least 1 healthcare provider considered as personal doctor or nurse Child has usual source(s) for both sick and well-child care

If child used at least 1 of 5 different services in the past 12 months — preventive medical care, preventive dental care, mental health treatment or counseling, saw a specialist, or needed to see a specialist:

Received family-centered, compassionate, culturally effective care from ALL child's doctors and other health care providers

If child needed referral(s), no problems getting referral(s)

If child needed care coordination (used at least 2 of 5 different services in the past 12 months from above), no problems getting effective care coordination

# **Evidence Supporting the Measure**

## Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

Focus groups

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

#### Additional Information Supporting Need for the Measure

- Nationally, 54.4% of children age 0 to 17 years receive health care that meets the American Academy of Pediatrics (AAP) definition of medical home.
- Children with special health care needs (CSHCN) are less likely to receive health care within a medical home than non-CSHCN: 46.8% versus 56.3%, respectively.
- Hispanic children are the least likely to receive health care within a medical home (37.2%), followed by Black, non-Hispanic (44.7%), and White, non-Hispanic (65.7%).

## Evidence for Additional Information Supporting Need for the Measure

The National Survey of Children's Health. [internet]. Baltimore (MD): Child and Adolescent Health Measurement Initiative (CAHMI); [accessed 2013 Dec 20]. [1 p].

# **Extent of Measure Testing**

The National Center for Health Statistics conducted testing of the 2011-12 National Survey of Children's Health Computer-Assisted Telephone Interview (CATI) to make sure the entire survey instrument was functioning properly. A total of 95,677 surveys were completed nationally for children between the ages of 0 and 17 years. The questionnaire was then revised and finalized based on feedback from participants in these interviews.

Both the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey Child Questionnaire and the CAHPS Children with Chronic Conditions (CCC) surveys were developed by the Child and Adolescent Health Measurement Initiative (CAHMI) (with substantial input from the CAHPS research team and the Agency for Healthcare Research and Quality [AHRQ]) and underwent substantial testing before becoming validated measures. The qualitative and quantitative testing of the CAHPS instruments helped inform the current version of this medical home measure as is used in the 2011-12 National Survey of Children's Health. In particular, three questions from the CCC subset of the CAHPS questionnaire are very similar to items in this medical home measure:

Child's doctors listen carefully to parent (same as K5Q41) Getting needed information (same as K5Q43) Coordination of care and services (same as K5Q20)

# **Evidence for Extent of Measure Testing**

Blumberg SJ, Foster EB, Frasier AM, Satorius J, Skalland BJ, Nysse-Carris KL, Morrison HM, Chowdhury SR, O'Connor KS. Design and operation of the National Survey of Children's Health, 2007. Vital Health Stat 1. 2012 Jun;(55):1-149. PubMed

Child and Adolescent Health Measurement Initiative (CAHMI). National Quality Measures Clearinghouse (NQMC) measure submission form: medical home: percentage of children and adolescents who meet the threshold for having a medical home according to a subset of questions from the 2011-12 National Survey of Children's Health. 2013 Apr. 16 p.

Measuring medical home for children and youth. Methods and findings from the National Survey of Children with Special Health Care Needs and the National Survey of Children's Health. Baltimore (MD): Child and Adolescent Health Measurement Initiative (CAHMI); 2009 May. 57 p.

Section 5: medical home. In: Summary of 2007 NSCH pretest results. Baltimore (MD): Child and Adolescent Health Measurement Initiative (CAHMI); p. 10-11.

# State of Use of the Measure

#### State of Use

Current routine use

#### **Current Use**

not defined yet

# Application of the Measure in its Current Use

# Measurement Setting

Ambulatory/Office-based Care

Patient-centered Medical Homes

Transition

# Type of Care Coordination

Coordination within a provider team/site

# Professionals Involved in Delivery of Health Services

not defined yet

# Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

## Statement of Acceptable Minimum Sample Size

Unspecified

## Target Population Age

Age less than or equal to 17 years

## **Target Population Gender**

Either male or female

# National Strategy for Quality Improvement in Health Care

#### National Quality Strategy Aim

Better Care

# National Quality Strategy Priority

Effective Communication and Care Coordination Health and Well-being of Communities Person- and Family-centered Care Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

#### **IOM Care Need**

**Getting Better** 

Living with Illness

Staying Healthy

#### **IOM Domain**

Effectiveness

Patient-centeredness

# Data Collection for the Measure

# Case Finding Period

## **Denominator Sampling Frame**

Geographically defined

#### Denominator (Index) Event or Characteristic

Geographic Location

Patient/Individual (Consumer) Characteristic

#### **Denominator Time Window**

not defined yet

## Denominator Inclusions/Exclusions

Inclusions

All children age 0 to 17 years in the United States (U.S.) for whom a 2011-12 National Survey for Children's Health was completed

Domain-specific denominators:

Established relationship with a specific provider:

Children age 0 to 17 years in the U.S.

Family-centered/Compassionate:

Children age 0 to 17 years in the U.S. who received at least 1 service from a doctor or other health care provider in the past 12 months

Comprehensive/Accessible:

Children age 0 to 17 years in the U.S.

Coordinated:

Children age 0 to 17 years in the U.S. who received 2 or more services from a doctor or other health care provider in the past 12 months

Children age 0 to 17 years in the U.S. who required communication between providers and school or educational institutions in the past 12 months

Culturally effective:

Children age 0 to 17 years in the U.S. who received at least 1 service from a doctor or other health care provider in the past 12 months

Children age 0 to 17 years in the U.S. who speak a primary household language other than English or unknown

Note: More specific denominators such as use of services-related skips are addressed in the "Numerator Inclusions/Exclusions" field.

Exclusions

Unspecified

# Exclusions/Exceptions

not defined yet

# Numerator Inclusions/Exclusions

#### Inclusions

Children who meet the following criteria for having a medical home:

Child has at least 1 healthcare provider considered as personal doctor or nurse (K4Q04)

Child has usual source(s) for both sick and well-child care (K4Q01, K4Q02)

If child used at least 1 of 5 different services in the past 12 months — preventive medical care, preventive dental care, mental health treatment or counseling, saw a specialist, or needed to see a specialist (K4Q20, K4Q21, K4Q22, K4Q24, K4Q25):

Received family-centered, compassionate, culturally effective care from ALL child's doctors and other health care providers (K5Q40, K5Q41, K5Q42, K5Q43, K5Q44)

If child needed referral(s), no problems getting referral(s) (K5Q10, K5Q11)

If child needed care coordination (used at least 2 of 5 different services in the past 12 months from above), no problems getting effective care coordination (K5Q20, K5Q21, K5Q22, K5Q30, K5Q31, K5Q32)

Domain-specific numerators: Composed of 16 individual questions in the 2011-12 National Survey for Children's Health, each falling under one of the domains of the American Academy of Pediatrics' (AAP) definition of a medical home (with the exceptions of "accessible" and "continuous" — the reasons for this are explained below):

Established relationship with a specific provider -1 question

K4Q04: Child has one or more health professionals considered by parent to be their child's personal doctor or nurse

Accessible — 0 questions

Note: Topics related to timely access to needed care or services are addressed under the "comprehensive/accessible" component of the definition.

Family-centered/Compassionate -4 questions

K5Q40: Child's doctors usually or always spend enough time with child

K5Q41: Child's doctors usually or always listen carefully to parent

K5Q43: Child's doctors usually or always provide specific needed information

K5Q44: Child's doctors usually or always helps parent feel like a partner in their child's care

Continuous - 0 questions

Note: Topics within this component are not assessed due to the methodological difficulties of measuring continuity of care over time in a reliable way using cross-sectional, point in time data.

Comprehensive/Accessible — 4 questions

K5Q10: Child needed a referral to see a doctor or to receive services

K5Q11: No problems getting the referral that was needed

K4Q01: Child has a place he/she usually goes when sick

K4Q02: Child's usual place to go when sick is a doctor's office, hospital outpatient department, clinic or health center, school, friend/relative, or some other place other than a hospital emergency room, or Mexico or other location out of the USA

Coordinated — 6 questions

K5Q20: Child's family gets help arranging or coordinating child's health care

K5Q21: Child's family needs extra help arranging or coordinating child's health care

K5Q22: Child's family usually gets the extra help they need arranging or coordinating child's health care

K5Q30: Parent very satisfied with the communication between their child's doctors and other providers

K5Q31: Parent needed doctors to communicate with their child's school or other programs

K5Q32: Parent very satisfied with the needed communication between their child's doctors and child's schools or other programs

Compassionate — 0 questions

Note: The concept of "compassionate care" is addressed in the "family-centered/compassionate" domain.

K5Q42: Child's doctors are usually or always sensitive to family's values and customs

Exclusions Unspecified

# Numerator Search Strategy

Fixed time period or point in time

#### **Data Source**

Patient/Individual survey

# Type of Health State

Does not apply to this measure

#### Instruments Used and/or Associated with the Measure

2011-12 National Survey of Children's Health

# Computation of the Measure

#### Measure Specifies Disaggregation

Does not apply to this measure

# Scoring

Composite/Scale

Weighted Score

# Interpretation of Score

Desired value is a higher score

# Allowance for Patient or Population Factors

not defined yet

# Description of Allowance for Patient or Population Factors

The medical home measure administered in its most recent form (in the 2011-12 National Survey for Children's Health) includes a number of child demographic variables that allow for stratification of the findings by:

Gender
Geographic location
Race/ethnicity
Health insurance - status, type, consistency, adequacy
Primary household language
Household income
Special health care needs - status and type

### Standard of Comparison

not defined yet

# **Identifying Information**

# **Original Title**

Measure of medical home for children and adolescents.

#### Measure Collection Name

2011/12 National Survey of Children's Health

#### Submitter

Child and Adolescent Health Measurement Initiative - Nonprofit Organization

# Developer

Child and Adolescent Health Measurement Initiative - Nonprofit Organization

Maternal and Child Health Bureau of the Health Resources and Service Administration - Federal Government Agency [U.S.]

National Center for Health Statistics of the Centers for Disease Control and Prevention - Federal Government Agency [U.S.]

# Funding Source(s)

Maternal and Child Health Bureau of the Health Resources and Service Administration

# Composition of the Group that Developed the Measure

A Technical Expert Panel (TEP), made up of members of the Maternal and Child Health Bureau, the National Center for Health Statistics, the Child & Adolescent Health Measurement Initiative, and external advisors, developed the medical home measure.

# Financial Disclosures/Other Potential Conflicts of Interest

The Child and Adolescent Health Measurement Initiative is partially supported by Cooperative Agreement

1-U59MC27866 from the Maternal and Child Health Bureau (MCHB), Health Resources and Services Administration, U.S. Department of Health and Human Services. No conflicts of interest exist.

## Adaptation

This measure was not adapted from another source.

#### Date of Most Current Version in NQMC

2013 Apr

#### Measure Maintenance

Unspecified

#### Date of Next Anticipated Revision

Unspecified

#### Measure Status

This is the current release of the measure.

This measure updates a previous version: National Survey of Children's Health. CATI instrument (full-length survey). Rockville (MD): Health Resources and Service Administration, Maternal and Child Health Bureau, and Centers for Disease Control and Prevention, National Center for Health Statistics; 2007. 112 p.

The measure developer reaffirmed the currency of this measure in October 2015.

# Measure Availability

| Source available from the Cen | ters for Disease Control a | and Prevention (CDC)  | National Center for Healtl |
|-------------------------------|----------------------------|-----------------------|----------------------------|
| Statistics Web site           |                            |                       |                            |
| For more information, contact | CAHMI at 615 North Wol     | fe Street, Room E4640 | ), Baltimore, MD 21205;    |
| Phone: 410-955-1848; Fax: 50  | 3-494-2473; E-mail: info   | @cahmi.org: Web site  | e: www.cahmi.org           |
| _                             |                            |                       |                            |

# Companion Documents

The following are available:

Blumberg SJ, Foster EB, Frasier AM, Satorius J, Skalland BJ, Nysse-Carris KL, Morrison HM, Chowdhury SR, O'Connor KS. Design and operation of the National Survey of Children's Health, 2007. Vital Health Stat 1. 2012 Jun;(55):1-149. This document is available from the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics Web site

Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. 2011-2012 National Survey of Children's Health state and local area integrated telephone survey: frequently asked questions. Atlanta (GA): Centers for Disease Control and Prevention; 2013 Apr. 8 p. This document is available from the CDC National Center for Health Statistics Web site

Child and Adolescent Health Measurement Initiative (CAHMI). 2011-2012 National Survey of Children's Health. SPSS code for data users: child health indicators and subgroups, version 1.0. Baltimore (MD): Data Resource Center for Child and Adolescent Health; 2013 Apr. 201 p. This document is available from the Data Resource Center for Child and Adolescent Health Web site

Measuring medical home for children and youth. Methods and findings from the National Survey of Children with Special Health Care Needs and the National Survey of Children's Health. Baltimore (MD): Child and Adolescent Health Measurement Initiative (CAHMI); 2009 May. 57 p. This document is available from the Data Resource Center for Child and Adolescent Health Web site

## **NQMC Status**

This NQMC summary was completed by ECRI Institute on June 24, 2010. The information was verified by the measure developer on July 28, 2010.

This NQMC summary was retrofitted into the new template on July 7, 2011.

This NQMC summary was updated by ECRI Institute on May 13, 2014. The information was verified by the measure developer on June 18, 2014.

The information was reaffirmed by the measure developer on October 27, 2015.

## Copyright Statement

No copyright restrictions apply.

# **Production**

# Source(s)

2011/12 National Survey of Children's Health. CATI instrument (full-length survey). Rockville (MD): Health Resources and Service Administration, Maternal and Child Health Bureau, and Centers for Disease Control and Prevention, National Center for Health Statistics; 2012. 126 p.

# Disclaimer

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